

Well planned and properly designed directional signs are important visitor aids. They lead visitors to a Corps project, direct them to the various recreation areas, and then guide them to the facilities within each area. Directional signs are highly visible, seen not only by the boaters, campers, swimmers, and picnickers using a facility, but also by the many people traveling in the vicinity of a Corps project. It is important, therefore, that directional signs are correctly fabricated, carefully placed, and properly maintained.

The Corps does not have authority to erect signs on the national system of interstate and defense highways. This responsibility is reserved for the respective state highway departments. However, under the signing policy and standards set forth in the *Manual on Uniform Traffic Control Devices (MUTCD)* for signing such highways, signs may be placed by the governing jurisdiction in cooperation with the Corps to direct travelers to Corps projects. A cordial working relationship with state agencies is essential to serve travelers' needs and make them aware of project features and facilities.

Directional signs must be provided on access roads to guide the visitor to a Corps project and its recreation areas. These signs should logically begin at the nearest state or U.S. highway used to approach the project and continue along the best route to a specific site. A sign should be provided at all intersections where a change of direction is necessary or where directional reinforcement is required. Design and installation of these directional signs must be fully

coordinated with the local or state highway department. In some cases, these agencies will furnish and install needed signs. If they cannot, permission to install Corps signs should be obtained. These signs are illustrated on pages 6-3 through 6-11. Consultation with the respective highway department should be made to ensure that signs satisfy local desires and standards.

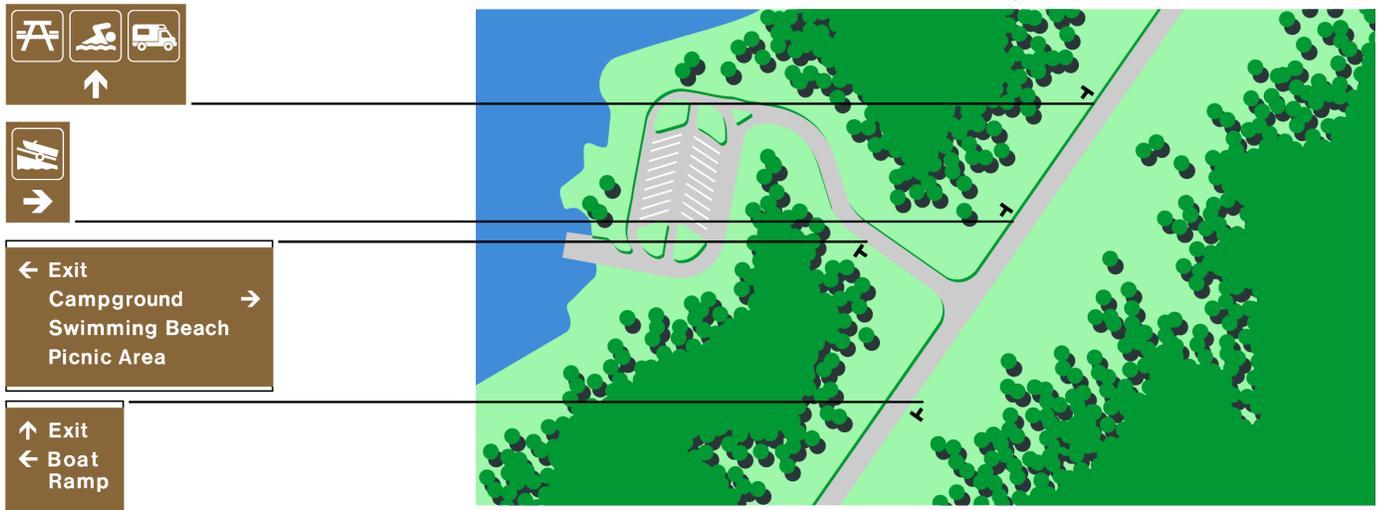
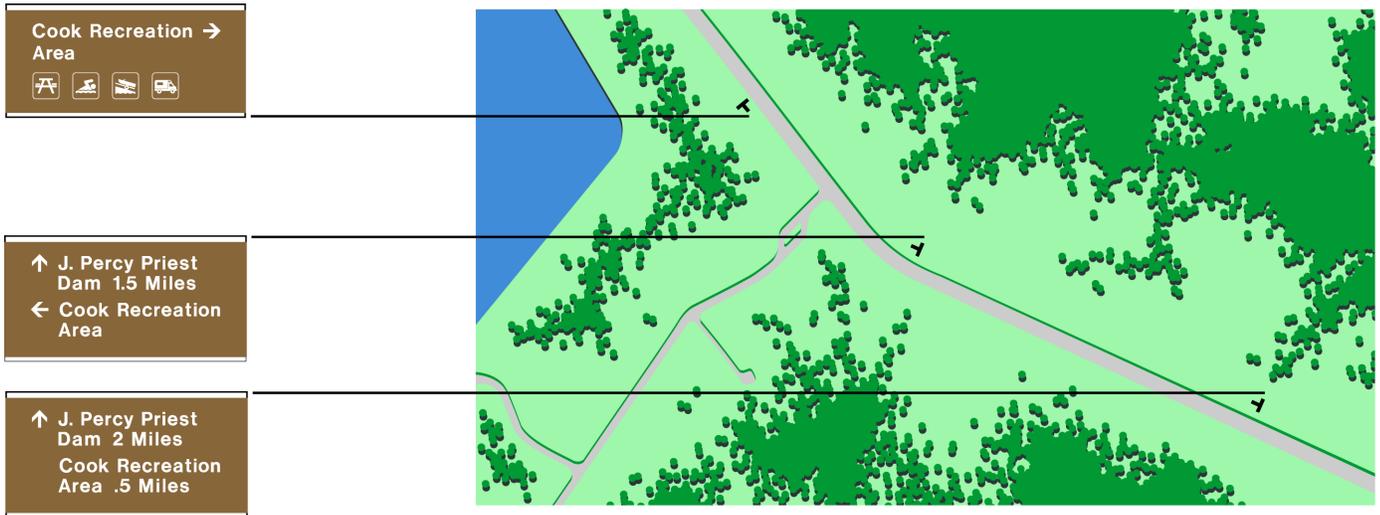
Signs directing potential users to a Corps project may be located several miles from that project. In such cases, it would be desirable to indicate the services available at that project using the recreation area symbols. These should logically include major services such as camping, RV accommodations, and boat launches. Users should be made aware of available services before visiting the site, which will often save a futile trip. In addition, an indication of services available is good public relations: passersby note what is available for future reference. There are two formats available for placing symbols indicating services on directional signs; these are illustrated on pages 6-10 and 6-11.

Directional signs within a project or recreation area are designed for viewing at slower speeds. Therefore, there is a different sign specifically designed for use on project roadways. Its use and format are shown on pages 6-12 to 6-16.

In addition, within a recreation area, symbols can be used for directional signs instead of words. Guidelines for their use will be found in Section 8, pages 8-10 to 8-14. Only positive symbols (no prohibition symbols) are to be used on directional signs.

The diagrams below illustrate the use of directional signs on the roads leading to a Corps project and within that project. On access roads, the signs are words alone (pages 6-3 to 6-9) or words accompanied by three or four symbols

(pages 6-10 and 6-11). Once inside a project, the signs are either words alone (pages 6-12 to 6-16) or symbols alone (pages 8-10 to 8-14).



The design of directional signs on public roadways has been standardized to maintain consistent visual identification for visitors approaching Corps projects. They have been designed for optimum legibility. The illustration below shows a typical directional sign. The elements of the sign design are described in the

captions to the left of the illustration.

These signs are usually made of aluminum or HDO plywood with applied retroreflective sheeting. The background color is Corps Brown (page 4-5); the lettering and borders are white. Typography is Helvetica Medium, initial capitals

only. To specify the size of typography, refer to the Viewing Distance Guide on page 2-6.

Border: Top border is one-half the size of basic grid unit A; bottom border is .375A.

Typography: Helvetica Medium, initial capitals only. The size of the capital letters determines the basic unit A of the layout grid (page 6-6). Letter size is the same for all messages on a given sign. All messages are aligned flush left.

Sign Panel: Layout based on grid. Overall size of panel determined by length and number of messages.

Color: Corps Brown background with white borders, arrows, and typography. Refer to color standards (page 4-5).

Note: If local rules or regulations prohibit use of Corps Brown on Approach Roadway Directionals, Recreation Brown (as per the *Specifications for Standard Highway Sign Colors*, published by the Federal Highway Administration) can be substituted.

Post: Attached to the back of the sign panel, set in two units (2A) from the outside edge of the panel. Size and material determined by panel size.

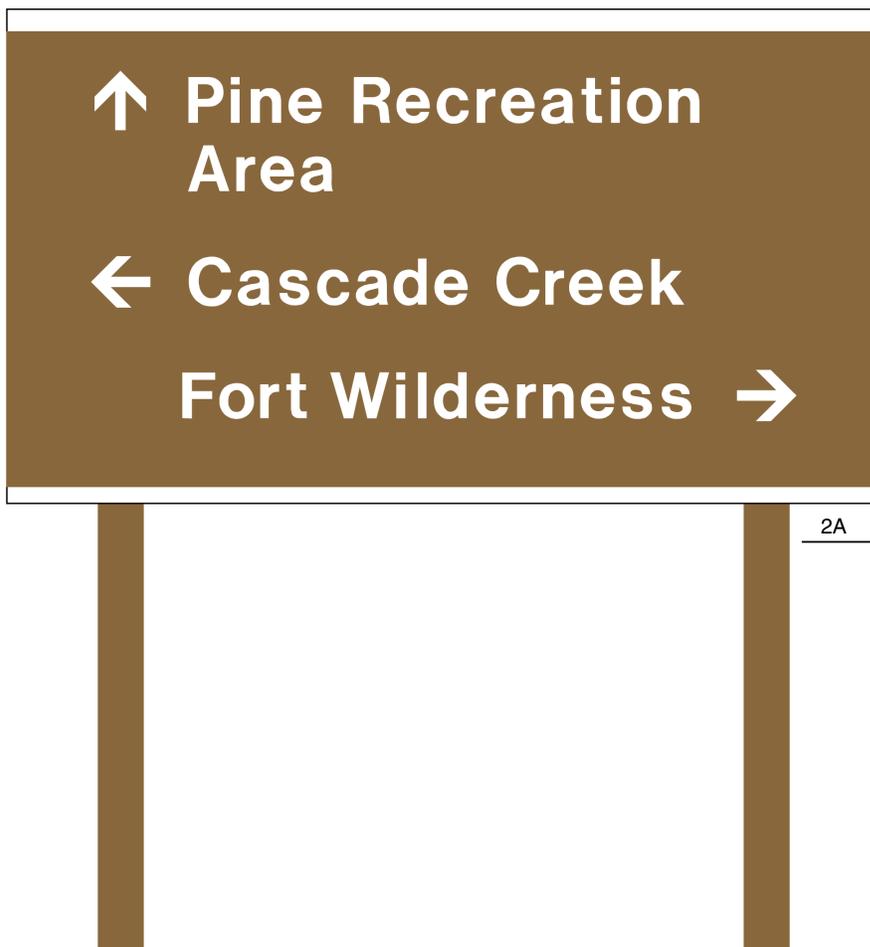
Materials: Signs are fabricated from HDO plywood or aluminum. The face is applied reflective sheeting. Refer to matrix shown below and specifications in Appendix B.

Arrows: An arrow may be placed on a sign panel to indicate one of five possible directions. (see page 4-13).

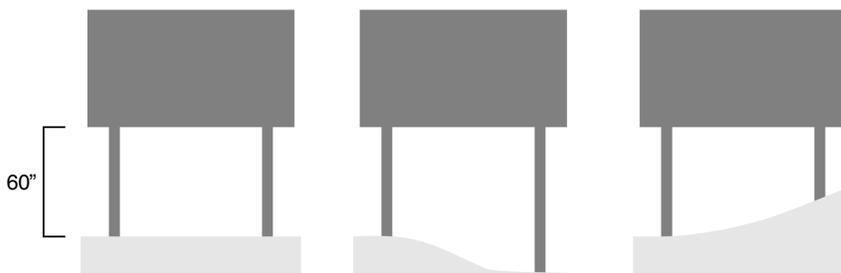
*Panel size varies with legend length and configuration (see page 6-6).

**Post size and number of posts required will depend on size of sign. Refer to the Directional Sign Post and Footing Specification in Appendix B.

Post length and mounting height for sign placed on sloping or inclined grade may require adjustment as shown for appropriate installation. For break-away posts, see page B-2a in Volume 2.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
APRDIR	4"	*	**	HDO-4/ALU-4	60"	BR/WH
APRDIR	6"	*	**	HDO-4/ALU-4	60"	BR/WH
APRDIR	9"	*	**	HDO-4/ALU-4	66"	BR/WH



The sign panels below illustrate the variety of configurations possible on Approach Roadway Directional signs. The lettering is always flush left and rag right. As a general rule, directional arrows should be horizontal or vertical, but at irregular intersections an oblique arrow will sometimes convey a clearer indication of the direction to be followed.

Arrows pointing left, oblique left, or straight ahead are placed to the left of the type. An arrow pointing right or oblique right is placed to the right of the type. An arrow indicating a destination straight ahead is placed first on a sign. Second priority is given to an oblique (45°) left arrow. Next is an arrow indicating a left turn. A 45° right arrow is

given fourth priority. An arrow indicating a right turn is given lowest priority on a sign. Note that there is only one arrow placed on the sign panel for each direction, regardless of the number of destinations associated with a given direction. Letter size is the same for all messages.

One line, one destination



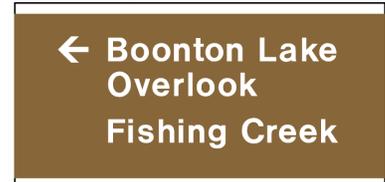
Arrow can be straight, 45° left, or left

Two lines, two destinations



Arrow can be straight, 45° left, or left

Three lines, two destinations



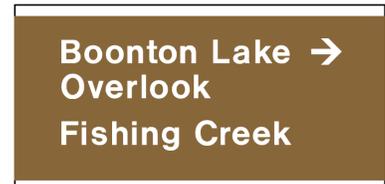
Arrow can be straight, 45° left, or left



Arrow can be 45° right or right



Arrow can be 45° right or right



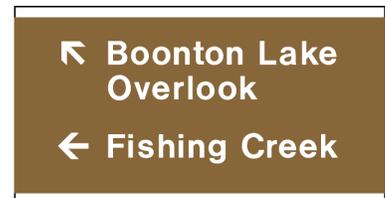
Arrow can be 45° right or right



Arrow can be 45° right or right
Shown with optional Corps Signature

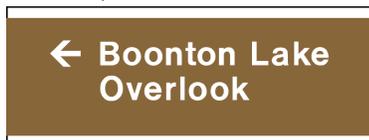


Arrows can be straight, 45° left, or left



Arrows can be straight, 45° left, or left

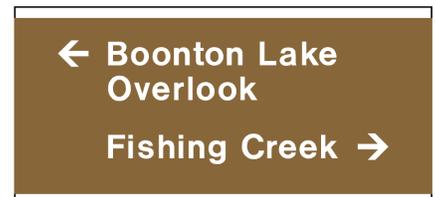
Two lines, one destination



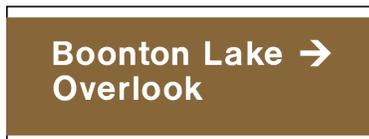
Arrow can be straight, 45° left, or left



Top arrow can be straight, 45° left or left
Bottom arrow can be 45° right or right



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right



Arrow can be 45° right or right



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right
Shown with optional Corps Signature

Destinations placed on signs to be read from a moving vehicle must be concise. To ensure brevity, follow these rules when preparing directional sign legends:

3) Not more than four words per destination, except where the proper name of a destination is made up of more than four words.

1) Not more than eight words per sign.

4) If there are more than eight words contained in three destinations, the third destination may be more appropriately put onto a separate sign.

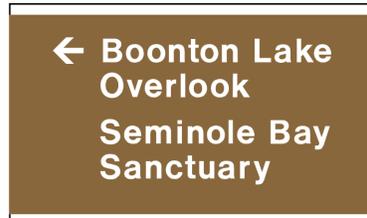
2) Not more than three destinations per sign.

Three lines, three destinations



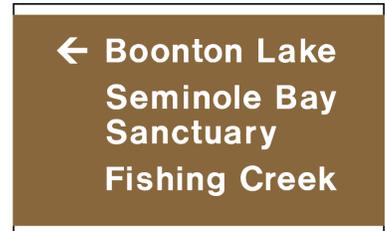
Arrow can be straight, 45° left, or left

Four lines, two destinations



Arrow can be straight, 45° left, or left

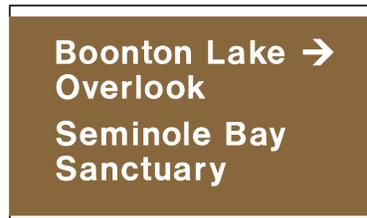
Four lines, three destinations



Arrow can be straight, 45° left, or left



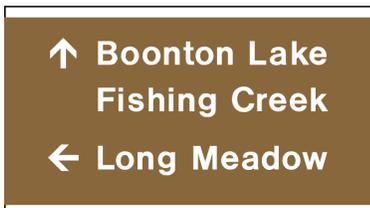
Arrow can be 45° right or right



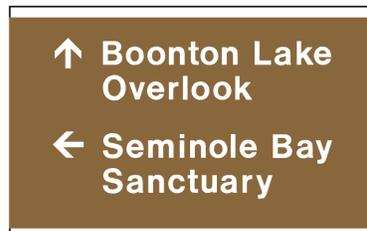
Arrow can be 45° right or right



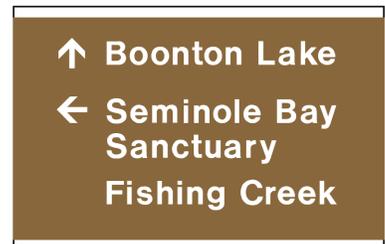
Arrow can be 45° right or right



Top arrow can be straight or 45° left
Bottom arrow can be 45° left or left



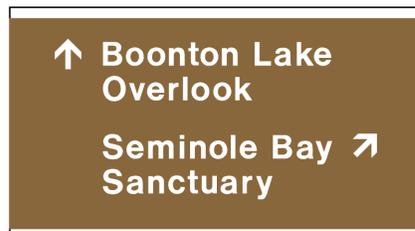
Top arrow can be straight or 45° left
Bottom arrow can be 45° left or left



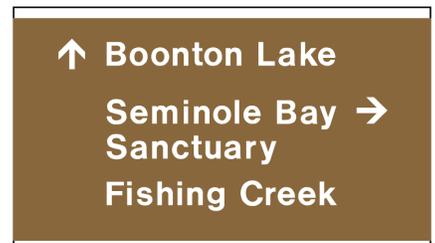
Top arrow can be straight or 45° left
Bottom arrow can be 45° left or left



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right



Top arrow can be straight or 45° left
Middle arrow can be 45° left or left
Bottom arrow can be 45° right or right



Top arrow can be straight or 45° left
Middle arrow can be 45° left or left
Bottom arrow can be 45° right or right

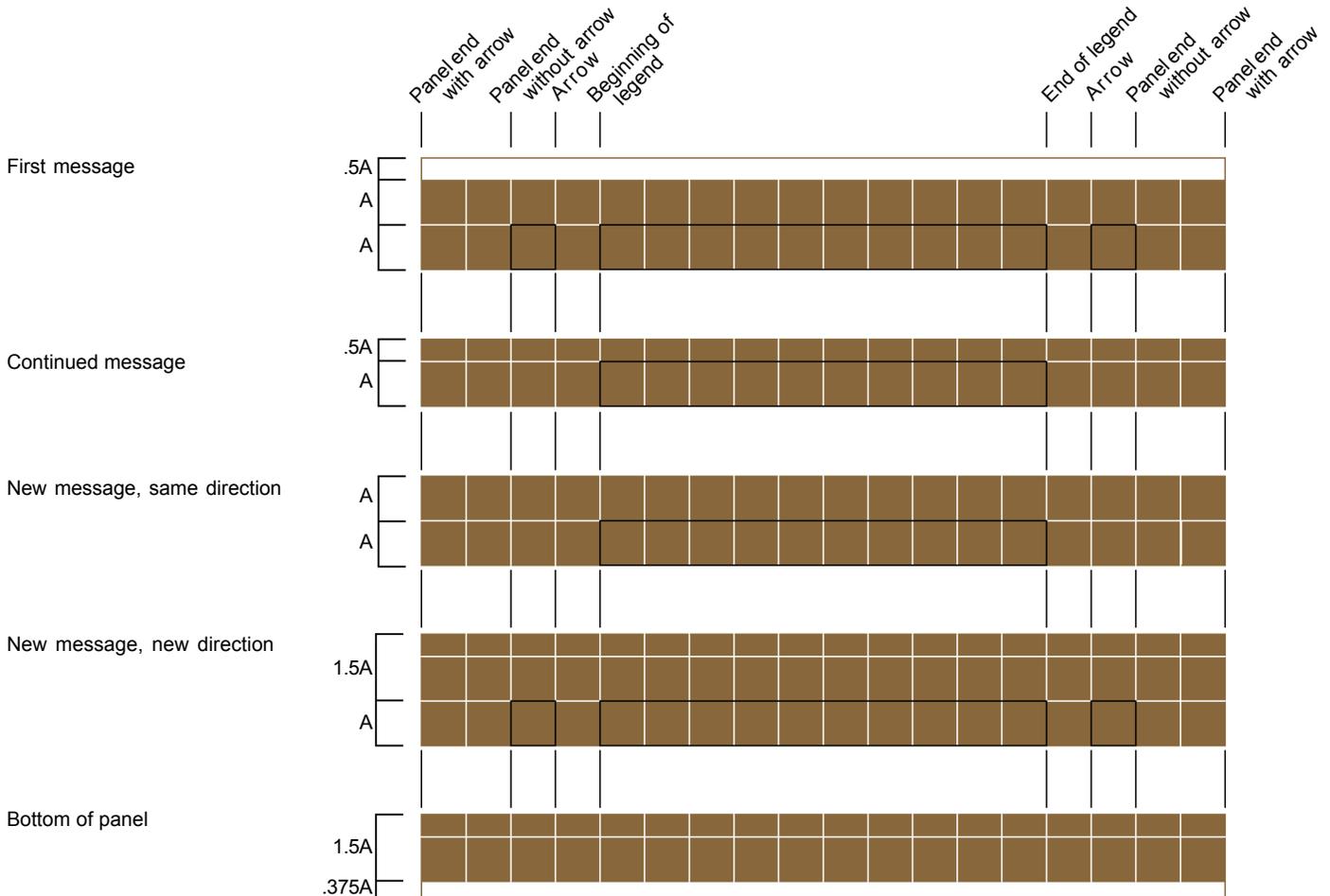
All directional signs on public roadways use the grid illustrated below for message format and typographic layout. The height of lettering used for legends, referred to as A, is the basic unit on which all dimensions are based. Letter size is based on viewing distance (see chart on page 2-6). Once the letter size is determined, all other dimensions follow. No matter what letter size is chosen, the relationships shown in the grid will remain

the same.

This grid format system consists of five parts, including the top and bottom borders. The top border equals .5A, the bottom border equals .375A. The first destination is placed one unit A below the edge of the top border. The placement of the next message depends on its relationship to the first destination. The different possibilities are: a continuation

of the first line, a new destination with the same directional, or a new destination with a different directional.

The length of the legends can be determined by typesetting (see D-1 for approved systems) or by calculating using the method outlined on page D-2. When there are no arrows on the right side of the sign, the sign panel ends 2A beyond the last letter on the longest line.



The width of the sign panel is based on the longest destination, plus space for arrows. When mileage to a destination is indicated, numerals are considered part of the message, just as if they were letters. Double the standard word-space between the legend and the mileage number. Place the word "Miles" after the number (see page 6-10). Directional legends with three or more words may be placed on two lines for ease of reading and to keep the panel from becoming overly long. For an explanation of how to divide a destination onto two lines, see page 2-4.

Arrows left or straight ahead are placed one unit A to the left of the first destination in that direction. The left edge of the sign panel is 2A units to the left of the arrow. An arrow right is placed to the right of the first destination with that directional, one unit A beyond the end of the longest destination on the sign panel. In some cases, this may mean that the arrow right is more than one unit from the lettering. The right edge of the sign panel is then 2A to the right of the arrow. When there are no arrows on the right side of the sign, the sign panel ends 2A beyond the last letter on the longest line.

The examples shown on pages 6-7 to 6-11 illustrate the use of the directional sign grid. Variations of the basic grid are shown below and on page 6-8. Directional signs displaying the optional Corps Signature are shown on page 6-9. Finally, directional signs with recreational symbols are shown on pages 6-10 and 6-11.

The signs on pages 6-7 and 6-8 have the

same messages but different directional arrows. As the examples show, spacing between lines and sign dimensions change with the use of different directionals. For instance, the sign panel on page 6-8 is two units wider than the panel on page 6-7 in order to accommodate arrows on both sides of the sign. Also note that the height is one unit more because all of the destinations have different directionals, requiring more

space between the lines than destinations with the same directionals.

Sign proportions are the same regardless of letter size. To determine the actual size of a sign, multiply the letter size A times the number of units. For example, if the type is 6", then the width of the sign below is 6" x 17.25 units, which equals 103.5". The height is 6" x 9.875 units, which equals 59.25". Following the same procedure, the sign on page 6-8

First message



New message, same direction



Continued message



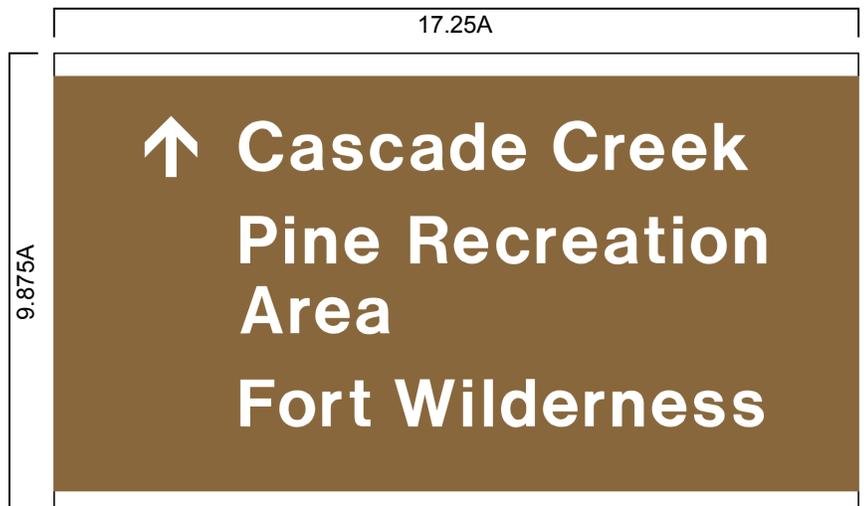
New message, same direction



Panel bottom



In this example, all of the destinations are in the same direction. The messages could be in any order, based on importance, proximity or visual layout on the sign panel. "Cascade Creek" is the most important destination in this example, and is placed first, one unit below the border. The next line "Pine Recreation Area" is a different destination in the same direction. Because it is significantly longer than the other two destinations, it should be divided into two lines. The first line is placed one A below the first destination, "Cascade Creek". Because "Area" is a continuation of the message, it is placed with a .5A line space below "Pine Recreation". The last destination, "Fort Wilderness," is also in the same direction, so it is placed one unit A below the preceding line. The bottom border is then placed with a 1.5A space below the last line. The overall size is 17.25 units wide and 9.875 units high.



is 115.5" x 65.25" with 6" lettering and
173.25" x 97.875" with 9" lettering.

First message



Continued message



New message, new direction



New message, new direction

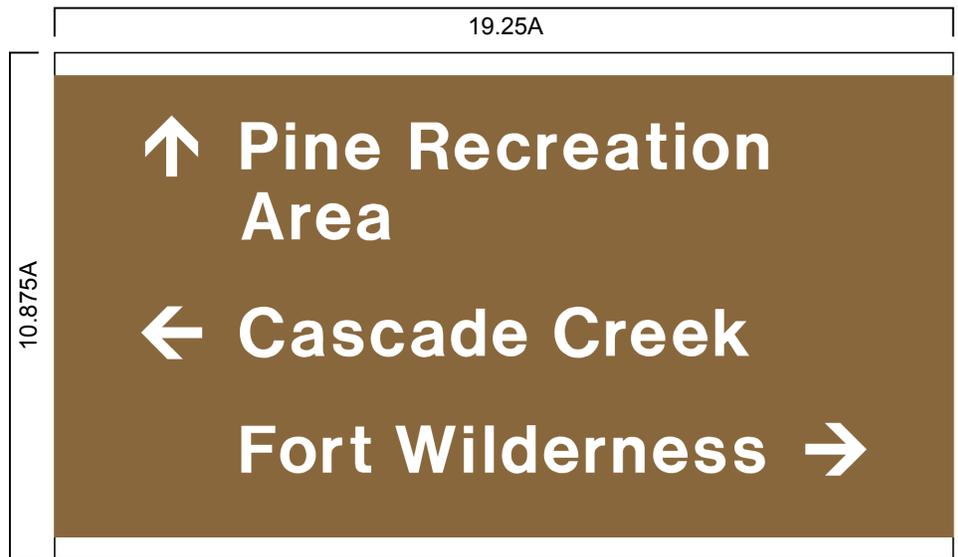


Panel bottom



In this second example, all of the destinations are in different directions: "Pine Recreation Area" is straight ahead; "Cascade Creek" is to the left; "Fort Wilderness" is to the right.

Destinations with arrows directed straight ahead are placed first (see page 6-4 and 6-5), so "Pine Recreation" is placed on the first line, one unit below the top border. The continuation of the previous line "Area" is placed below with a .5A line space separating the first and second line of the group. Since "Cascade Creek" is a different destination, it is separated with a 1.5A space below the previous line. The last line, "Fort Wilderness" is again a different destination in a new direction, so it is separated with a 1.5A space below the previous line. As in the example on the previous page, the bottom border is 1.5A below the last line. The finished sign is 19.25 units wide and 10.875 units high.



The use of the Corps Signature on Approach Roadway Directional signs can be an effective device to promote public awareness of the Corps presence in a region and our contributions to a local community. Using the Signature on our directional signs can also guide motorists who specifically seek Corps recreation areas or other points of interest as

they travel the country.

The Corps Signature consists of the Corps Mark (the castle logo) above the name "US Army Corps of Engineers."

Because Approach Roadway Directional signs are usually placed on highway rights-of-way owned by another agency, the use of the Signature may not always be permitted.

If the other agency has given permission, using the Corps Signature on these signs is optional. The Sign Program Manager should consider such factors as usefulness to travelers, cost, maintenance, vandalism potential, etc., when deciding whether to use the Signature.

First message



Continued message



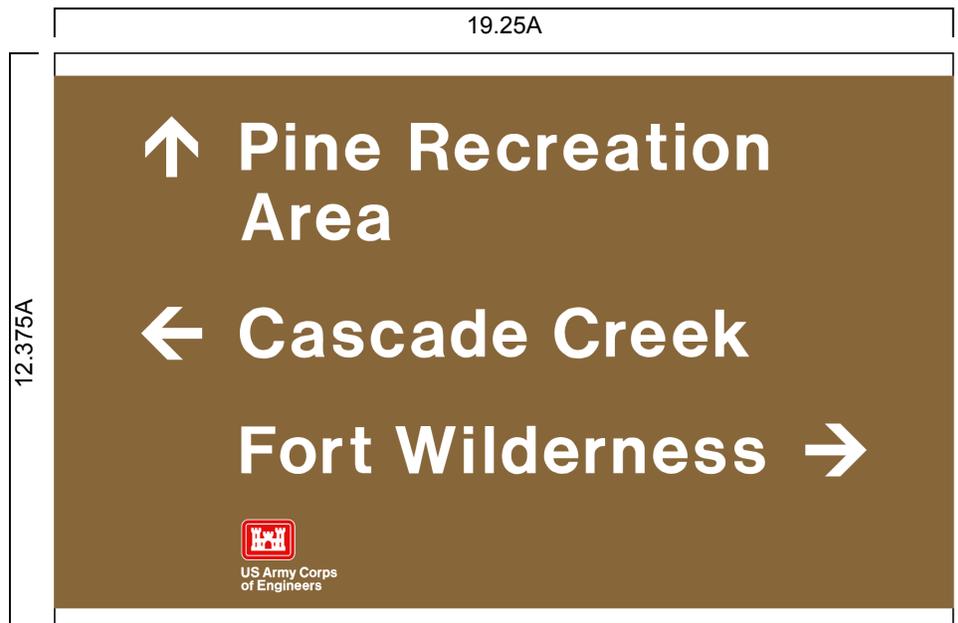
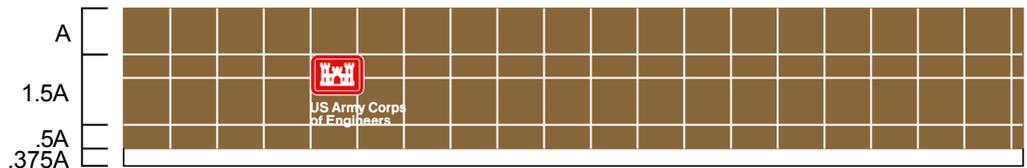
New message, new direction



New message, new direction



Bottom of panel



Two formats, one shown below and one on the following page, are provided for placing symbols indicating services on an Approach Roadway Directional sign. In both cases, there is to be only one written destination placed on a maximum of two lines. The first format is for use with three symbols. The second format is for use with four symbols. The pictograms in the

three-symbol configuration are slightly larger than those in the four-symbol layout.

Where mileage to a destination is indicated, double the standard word-space between the last letter of the message and the numeral.

First message



Continued message



Three symbols



Panel bottom



The symbols are equal to 2A in height, as measured to the outside edge of the holding line around the image, and are placed with a one unit A line-space below the previous line. The first symbol is aligned flush left with the typography. Each symbol is one unit A to the right of the previous symbol. The bottom of the panel is one unit A deep.

Option: the Corps Signature may be used on this sign either in place of the first recreation symbol or on a separate line below the recreation symbols (use panel bottom grid on page 6-9, but make the Signature height 2A).



*Panel size varies with legend length and configuration.

**Post size and number of posts required will depend on size of sign. Refer to the Directional Sign Post and Footing Specification Matrix in Appendix B.

Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
APRS-3	4"	*	**	HDO-4/ALU-4	60"	BR/WH
APRS-3	6"	*	**	HDO-4/ALU-4	60"	BR/WH
APRS-3	9"	*	**	HDO-4/ALU-4	66"	BR/WH

The layout of a sign with four symbols is identical to that for three symbols, except for the reduced size of the symbols. When there are four symbols, their height is equal to 1.5A as measured to the outside edge of the holding line around the image rather than 2A as shown on the previous page. The symbols are placed

one unit A line space below the legend line. One unit A space is placed between each symbol. The bottom panel is one unit A deep.

Refer to the display on pages 8-15 to 8-27 to select symbols.

First message



Continued message



Four symbols



Bottom of panel



Option: the Corps Signature may be used on this sign either in place of the first recreation symbol or on a separate line below the recreation symbols (use panel bottom grid on page 6-9).



*Panel size varies with legend length and configuration (see page 6-6).

**Post size and number of posts required will depend on size of sign. Refer to the Directional Sign Post and Footing Specification in Appendix B.

Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
APRS-4	4"	*	**	HDO-4/ALU-4	60"	BR/WH
APRS-4	6"	*	**	HDO-4/ALU-4	60"	BR/WH
APRS-4	9"	*	**	HDO-4/ALU-4	66"	BR/WH

Directional signs within the boundaries of a Corps project or facility are similar in look to the Approach Roadway Directionals, but are simpler, more compact, and more appropriate for viewing at slower speeds. The typography is Helvetica Medium. To specify the size of typography, refer to the Viewing

Distance Guide on page 2-6. Because they are viewed at a slower speed, the panel has a different layout configuration. The signs can be made of HDO plywood or aluminum with retroreflective sheeting. The colors, Corps Brown and white (page 4-5), are the same as those used for Approach Roadway Directionals.

The illustration below shows a typical directional sign for use within a Corps project. The elements of the sign design are described in the sidebar to the left of the illustration. The use of the Corps Signature is not permitted.

Sign Panel: Layout based on grid. Overall size of panel determined by length and number of destinations.

Typography: Helvetica Medium, initial capitals only. The size of the capital letters determines the basic unit A of the layout grid (page 6-15). Letter size is the same for all messages on a given sign. All messages are aligned flush left.

Color: Corps Brown background with white typography and arrows.

Post: Nominal width is equal to A. Post is attached to the back of the sign panel, set in 2 units (2A) from the outside edge of the panel.

Arrows: An arrow may be placed on a panel to indicate one of five possible directions (see page 4-13).

Materials: Signs can be constructed of HDO plywood or aluminum with retroreflective sheeting background and graphics.

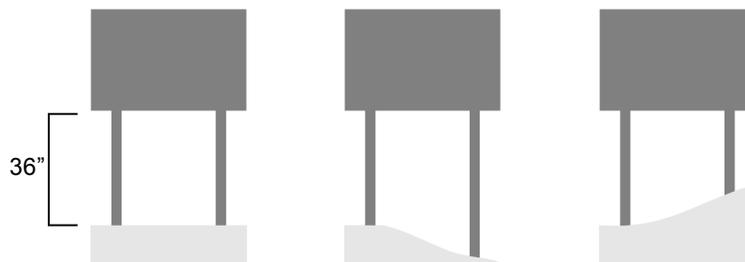


*Panel size varies with legend length and configuration (see page 6-15).

**Post size and number of posts required will depend on size of sign. Refer to the Directional Sign Post and Footing Specification in Appendix B.

Post length and mounting height for sign placed on sloping or inclined grade may require adjustment as shown for appropriate installation.

Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
PRJDIR	2"	*	**	HDO-5/ALU-5	36"	BR/WH
PRJDIR	3"	*	**	HDO-4/ALU-4	36"	BR/WH
PRJDIR	4"	*	**	HDO-4/ALU-4	36"	BR/WH
PRJDIR	6"	*	**	HDO-4/ALU-4	48"	BR/WH



The sign panels below illustrate the variety of configurations possible on directional signs on Corps projects. The lettering is always flush left. Arrows pointing left, oblique left, or straight ahead are placed to the left of the type. An arrow pointing oblique right or right is

placed to the right of the type. An arrow indicating a destination straight ahead is placed first on a sign. Second priority is given to an oblique (45°) left arrow. Next is an arrow indicating a left turn. A 45° right arrow is given fourth priority. An arrow indicating a right turn is given

lowest priority on a sign. Note that there is only one arrow placed on the sign panel for each direction, regardless of the number of destinations associated with a given direction. Letter size is the same for all destinations.

One line, one destination



Arrow can be straight, 45° left, or left

Two lines, two destinations



Arrow can be straight, 45° left, or left

Three lines, three destinations



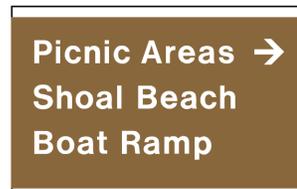
Arrow can be straight, 45° left, or left



Arrow can be 45° right or right



Arrow can be 45° right or right



Arrow can be 45° right or right

Two lines, one destination



Arrow can be straight, 45° left, or left

Three lines, two destinations



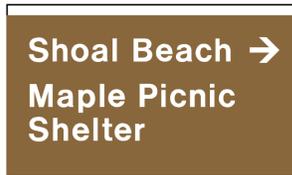
Arrow can be straight, 45° left, or left



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right



Arrow can be 45° right or right



Arrow can be 45° right or right



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right

Messages placed on signs to be read from a moving vehicle must be concise. To ensure brevity, follow these rules when preparing directional sign legends.

1) Not more than ten words per sign.

2) Not more than four destinations on four lines per sign.

3) Not more than four words per destination, except where the proper name of a destination is made up of more than four words.

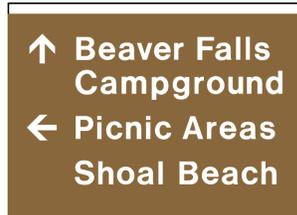
4) If there are more than ten words contained in four destinations, the fourth destination may be more appropriately put onto a separate sign.

Four lines, two destinations



Arrow can be straight, 45° left, or left

Four lines, three destinations



Arrows can be straight, 45° left, or left

Four lines, four destinations



Arrow can be straight, 45° left, or left



Arrow can be 45° right or right



Arrow can be 45° right or right



Arrow can be 45° right or right



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right



Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right



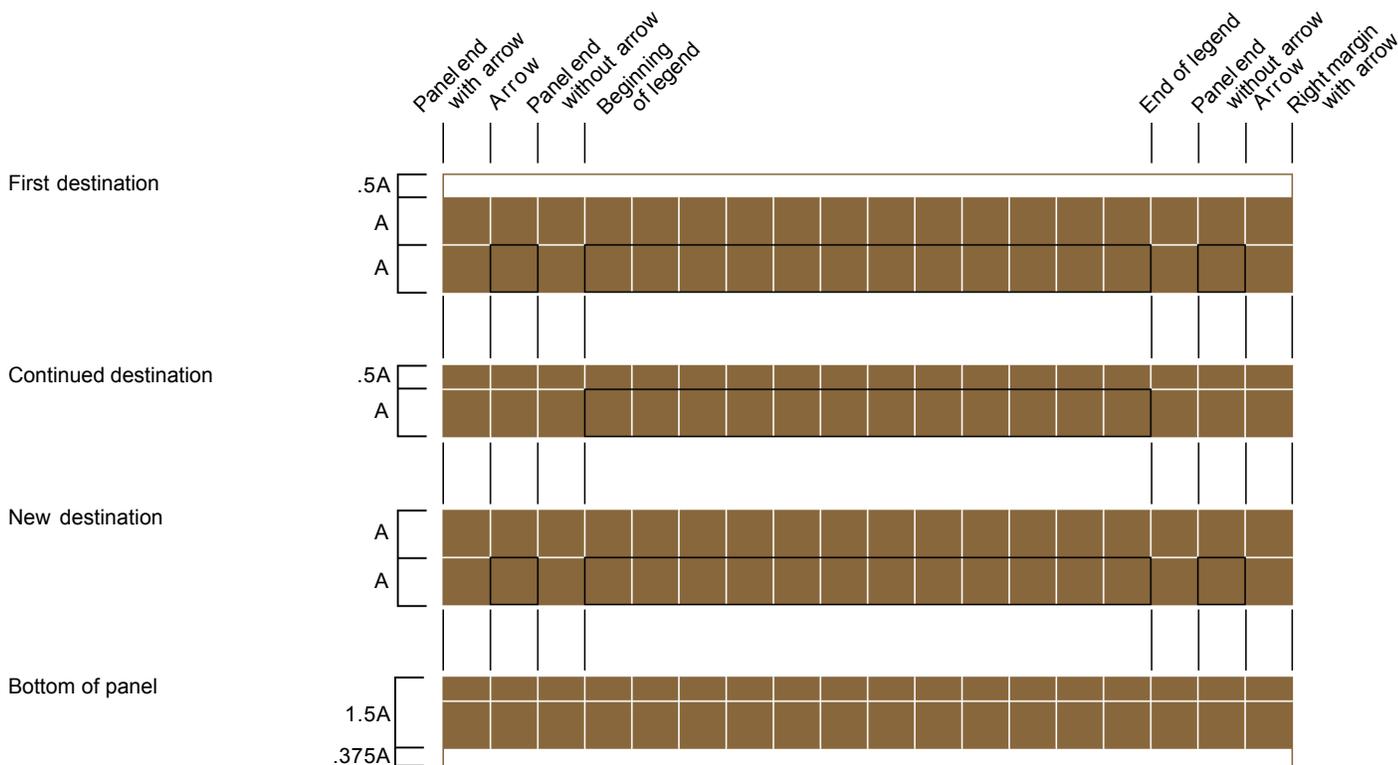
Top arrow can be straight, 45° left, or left
Bottom arrow can be 45° right or right

All directional signs on roadways within Corps boundaries use the grid illustrated below for message format and typographic layout. The height of lettering used for legends, referred to as A, is the basic unit on which all dimensions are based. Letter size is based on viewing distance (see chart on page 2-6). Once the letter size is determined, all other

dimensions follow basic unit A. No matter what letter size is chosen, the relationships shown in the grid will remain the same.

The grid consists of four parts, including the top and bottom borders. Just as on the Approach Roadway Directional, the top border equals .5A, the bottom border

equals .375A. The first destination is placed one unit A below the top border of the sign. The placement of the next line depends on whether it is a continuation of the destination, or a new destination. Unlike Approach Roadway signs (page 6-6), the spacing between lines is the same for new legends of the same direction or for legends to a different direction.



The width of the sign panel is based on the longest destination, plus space for arrows. Arrows straight ahead, 45° left, or left are placed one unit A to the left of the first destination in that direction. The left edge of the sign panel is one A unit to the left of the arrow. An arrow 45° right or right is placed to the right of the first destination with that directional, one unit A beyond the end of the longest destination on the sign panel. In some cases this means that the arrow right is more

than one unit from the lettering. The right edge of the sign panel is then 1 A to the right of the arrow. When there is an arrow on only one side of the sign, the sign panel ends 1 A beyond the last letter on the longest line.

The legend length can be determined by typesetting (see D-1 for approved systems) by calculating using the method outlined on page D-2, or by using the sign software.

The example below illustrates the use of Project Roadway Directional sign grid. The first destination, "Daniel Oscar Picnic Area", is the one with a straight-ahead arrow. Because it is significantly longer than the other two messages, it is divided into two lines. The first line is located one

unit A below the border. "Picnic Area", being a continuation of the same destination, is placed with a .5A line-space below the first line. The next destination, "Nature Area", has a left-turn arrow. It is placed with a one unit A line-space below the first destination. The last destination,

"Swim Beach", has a right-turn arrow. It is placed with a one unit A line-space below the last destination. The bottom of the sign panel is 1.5A plus border below the last destination. The total height of the sign is 9.875 units. The width is 15.125 units.

First destination



Continued destination



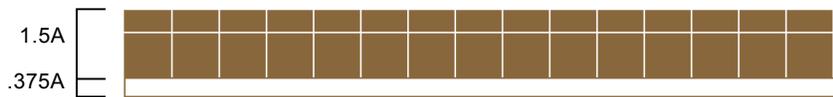
New destination



New destination



Bottom of panel



Sign proportions are the same regardless of letter size. To determine the size of the sign panel, multiply the letter size, A, times the number of units. For example, if the type is 4", the length of the sign shown to the right is 4" x 15.125 units, which is 60.5". The depth is 4" x 9.875 units which equals 39.5". With 3" lettering, the length is 45.375" (3" x 15.125 units) and the depth is 29.625" (3" x 9.875 units).

